The Effects of Internal Audit Outsourcing on Perceived External Auditor Independence

Marshall A. Geiger
Professor of Accounting
Department of Accounting
University of Rhode Island
Kingston, RI 02881-0802
geiger@uriacc.edu

D. Jordan Lowe
Associate Professor
School of Business Administration
5998 Alcala Park
University of San Diego
San Diego, CA 92110-2492
dlowe@acusd.edu

Kurt Pany
Professor of Accountancy
School of Accountancy
Arizona State University
Tempe, Arizona 85287-3606
kurt.pany@asu.edu

June 2, 1999

We greatly appreciate the financial support of the University of Rhode Island, Virginia Polytechnic Institute and State University and Arizona State University. We acknowledge the valuable comments made by Arthur Siegal, Executive Director of the Independence Standards Board, Susan Ayers, Sunita Ahlawat, Gene Chewning, and Curtis Vershoor.
The Effects of Internal Audit Outsourcing on Perceived External Auditor Independence

SUMMARY

The accounting profession is currently attempting to redefine its role and is expanding the types of services provided. With this expansion, however, comes a concern regarding the potential lack of independence between the auditor and the client requesting these services. This exploratory study examines whether the outsourcing of the internal audit function to the company’s external auditor affects financial statement users’ perceptions of auditor independence and financial statement reliability, as well as loan decisions. The overall objective of this study is to assess reactions to various internal audit outsourcing arrangements, and in doing so, to evaluate the accounting profession’s current position regarding the acceptability of performing this type of “extended audit service” to audit clients.

Results indicate no significant differences in perceptions or decisions when the outsourced internal audit was performed by another external auditor (i.e., not their own external auditor) compared to when this service was performed in-house. Conversely, significant differences were found across the various outsourcing groups involving the company's external auditor and the non-outsourced group. Specifically, auditor performance of management functions had a significantly negative impact on users’ perceptions of auditor independence and financial statement reliability, and resulted in the lowest percentage of loan approvals. However, the separation of audit firm staff performing the outsourced internal audit from those performing the financial statement audit had a significantly positive impact on financial statement users’ perceptions and loan approvals. The findings of this study support the AICPA’s current position regarding the acceptability of auditors performing outsourced internal audit activities for clients as long as the auditor does not engage in management functions. The results also support establishing a requirement to provide a distinct separation of staff within the CPA firm for those performing the outsourced internal audit from those performing the financial statement audit.

Key Words: Auditor independence, Internal audit outsourcing, Extended audit services, Staff separation.

Data Availability: Data used in this study is available upon request from the authors.
INTRODUCTION

“Independence is the cornerstone of the accounting profession and one of its most precious assets.” Robert Mednick, Chair, American Institute of Certified Public Accountants (AICPA) Board of Directors, 1997.

Global competition and overcapacity have prompted many companies to downsize, reengineer and implement substantial organizational changes. As a cost reduction strategy, companies have begun to outsource (i.e., engage outside individuals or organizations to provide services previously done within the company) many of their non-core functions such as data processing, taxation and legal services (Hodgson and Puschaver 1995; Petravick 1997). This strategy has also led to the outsourcing of some or all of the company’s internal audit activities (Aldhizer and Cashell 1996; Cheney 1995). Banking and financial services companies were among the first to outsource their internal audit function, beginning a trend that quickly expanded into retailing and other industries (Accounting Today 1995a, b; Pelfrey and Peacock 1995; Widener and Selto 1998). Now more than 50 of the Fortune 100 firms have outsourced a substantial portion of their internal audit activities (Krishnan and Zhou 1997).

Concurrent, audit revenues over the last decade have been relatively stagnant, causing CPA firms to expand their search for alternative ways to enhance current and future income streams (Elliott and Pallais 1997; Petravick 1997; Schoeder and MacDonald 1997). A number of CPA firms have begun to view internal audit activities as an attractive niche for revenue growth and are looking at new as well as existing clients for this growth (Berton 1996; Public Accounting Report 1994, 1997a). In fact, most of the Big Five CPA firms have created their own business units to market and deliver internal audit outsourcing services (Kusel and Gauntt 1997; Public Accounting Report 1996b; Zhou 1998). CPA firms argue that they can provide
internal auditing services more effectively by promising (1) better audit quality, (2) more professional and experienced personnel, (3) improved specialization, (4) a shift of liability to external organizations, and (5) a shift in management’s focus to core business issues (Cheney 1995; Courtemanche 1991; IIA 1995; Vershoor 1992).

The coupling of the external auditor with the internal audit function, which has traditionally been viewed as an exclusively in-house management directed function, has not emerged without controversy (IIA 1995; Rankin 1995). While some view such work as a natural extension of the external auditor’s work for the client (and refer to it as “extended audit services”), others construe such involvement of the external auditors as an indication of a potential lack of independence. The Securities and Exchange Commission (SEC) has expressed concern that this relationship may create a “mutuality of interests” with management of registrants for which the auditor provides services (Levitt 1996).

To date, however, no empirical evidence exists that attempts to assess financial statement user perceptions or decisions regarding the practice of outsourcing internal audit activities to external auditors. Do users believe that auditor independence or financial statement reliability are jeopardized when external auditors are engaged to perform internal audit activities as “extended audit services”? While several studies have examined the extent of internal audit outsourcing (e.g., James 1994; Pelfrey and Peacock 1995; Petravick 1997; Schulz 1995), no study has attempted to assess the impact of outsourcing internal audit on financial statement users’ perceptions of auditor independence and related decisions. The purpose of this study is to begin such an investigation. Specifically, this exploratory study assesses both perceptions of auditor independence and financial statement reliability, as well as a loan decision when a CPA firm has performed extended audit services (i.e., internal audit activities) for an audit client. The
objective is to examine financial statement users’ reactions to the existence of different types of relationships between CPAs and their audit and nonaudit clients regarding the performance of internal audit related tasks.

RESEARCH QUESTION DEVELOPMENT

Background

The importance of auditor independence, both actual and as perceived by others, has been widely recognized both in theory and by regulators. DeAngelo (1981a, b) defines audit quality as the market-assessed joint probability that the auditor will both (a) discover a breach in the accounting system and (b) report the breach. She argued that rational individuals perceive that auditors who have an economic interest in their clients (and thus lack independence) may be less apt to report a discovered breach or apply less effort to discover one. DeAngelo defines economic interest as a future “quasi-rent” stream in which quasi-rents represent the present value of future revenues (less costs) over the expected duration of an auditor-client relationship. In the context of this study, an economic interest could include future non-audit or extended audit service revenues from audit clients.

Recently, some have suggested a different interpretation of the auditor/client relationship whereby the economic interests of the CPA firm in maintaining their reputational capital (and reducing legal liability exposure) may provide incentives to safeguard independence (AICPA 1997b). This perspective suggests that the existence of quasi-rents may actually reinforce the independence between the auditor and their clients. That is, quasi-rents from their other clients would be at risk if the firm compromised their independence with respect to a specific audit client. Any benefit derived from substandard conduct for a specific client would be small compared to the potential loss of quasi-rents from a multitude of clients. Given that the firm’s
total expected return is directly related to their reputation among multiple clients, the auditor has incentives to remain independent (AICPA 1997b).

**Internal Audit Outsourcing**

The audit profession in the United States has fought to build and preserve its image of trusted, independent external attester to management financial information. Recently, the Public Oversight Board (POB) of the AICPA’s SEC Practice Section has stated that the profession is at a “critical juncture” and must reexamine its role in providing public services or lose its ability to self-regulate. The POB reiterates that members of the profession providing “auditing and other attestation services should be independent in fact and appearance” (emphasis in original, POB 1995). Their concern is that the CPA firms’ involvement in extended audit services (i.e., internal audit outsourcing) has the potential to compromise the objectivity or independence of the auditor by diverting attention away from the public responsibility associated with the independent audit function (POB 1994).

As CPA firms have begun to get involved in internal audit outsourcing, new independence issues have arisen regarding the propriety of these firms performing both the internal and external audit functions for the same company. Already companies such as Enron Corp., First Bank System, Inland Steel, McDermott International Inc., Montgomery Ward, and Unicom Corp. have outsourced their entire internal audit function to their own external auditors (Berton 1996; Krishnan and Zhou 1997; Vershoor 1992). Recent research suggests that almost half of the internal audit outsourcing engagements are performed by the company’s external auditor (Pelfrey and Peacock 1995; Public Accounting Report 1996a). This activity has not gone unnoticed by regulators.
SEC chief accountant Michael Sutton observes that external auditors offering these internal audit services to their audit clients, are too closely aligned with traditional management functions and activities (Public Accounting Report 1996d). Such emerging services raise doubts about auditor independence with respect to public companies. Sutton further asks:

How can the auditor be independent in attesting to management’s assertions regarding internal controls when (a) management, in part, is relying on the external auditor’s work (performed on an outsourced basis) to develop its assessment of internal controls; and (b) the external auditor would, in part, be attesting to the quality of his own work (Rittenburg and Covaleski 1997).

Further, the Institute of Internal Auditors (IIA) believes that a clear conflict of interest exists when the same CPA firm that performs the external audit also has primary responsibility for the internal audit. The IIA asserts that under this arrangement the CPA firm becomes an indirect advocate of management assertions. External auditors may thus have a tendency to serve corporate management rather than shareholders and investors (Cheney 1995, 1996). iii

The AICPA has taken a somewhat different stance on this issue. The profession contends that independence-related concerns have been overstated and that guidelines have recently been implemented to prevent firms carrying out internal audit outsourcing activities from performing management functions (Carmichael 1998; Rittenburg and Covaleski 1997). The AICPA explicitly addressed this issue and set forth guidelines in its Interpretation 101-13 under Rule of Conduct 101, Extended Audit Services (AICPA 1997a; Anderson 1996). This interpretation supercedes the AICPA’s Ethics Ruling 97 and sets forth the parameters as to when and how such internal control related services would be allowable under professional standards and still maintain the external auditor’s independence (Sutton 1997). The Interpretation states that independence would not be considered to be impaired if “the member or his or her firm does not act or does not appear to act in a capacity equivalent to a member of client management or as an
employee” (AICPA 1997a). In essence, the interpretation concludes that such services would not of themselves impair the auditor’s independence if the responsibility for the internal audit function remains with a member of company management and the auditor does not assume management’s operational or decision making responsibilities.

The AICPA further asserts that the external auditors’ performance of internal audit activities may actually improve audit quality by providing external auditors with considerable knowledge about the client, its operations, and its industry (AICPA 1997b). The greater the external auditors’ insight into the client the more likely it is that business transactions will be understood and key audit risks identified (AICPA 1997b; Public Accounting Report 1997b). External auditors armed with greater knowledge and insights of their client would be more apt to discover errors and fraud and thereby perform a higher quality audit. These auditors may also be more apt to communicate problems they discover to the external CPA firm than internal auditors (under management’s control), thereby reducing the possibility of investor losses due to fraud (Carmichael 1998; Wallman 1996).

In spite of these guidelines and assurances, some remain concerned that the AICPA’s new guidance will not alleviate potential independence problems (Internal Auditor 1996). What may be needed is a safeguard that requires a distinct separation of the individuals within the CPA firm that perform the external audit versus those that perform the (outsourced) internal audit. That is, potential independence problems may exist only if the same individuals within the CPA firm that perform the external audit also perform the internal audit (Vershoor 1992). Providing a wall between CPA engagement teams that provide internal audit services and those that provide financial statement audits may strengthen public confidence that the (independent) external audit function is not influenced by other relationships (Sullivan 1995; Sutton 1996). Further, this separation of engagement personnel would not preclude important information from being communicated to the audit engagement team that would be relevant to the external audit (AICPA 1997b). Given the appeal of this concept, some firms (i.e., Deloitte and Touche) have already implemented this separate teams approach (Rittenburg and Covaleski 1997).
Research Questions

This study attempts to answer two general research questions. The first issue addressed is whether outsourcing of a company’s internal audit function to another external auditor (i.e., not their own external auditor), affects financial statement users’ perceptions of auditor independence, the reliability of the financial statements, and their willingness to grant loans. This type of outsourcing relationship is not uncommon as companies at times would prefer to outsource their internal audit function to another external auditor than the one that performs their external audit (Petravick 1997; Vershoor 1992). For instance, Morrison Knudson has retained Deloitte & Touche as its external auditor and has outsourced its internal audit function to Arthur Anderson (Krishnan and Zhou 1997). This arrangement would appear to be fairly innocuous and should have little effect on financial statement user perceptions or decisions (Ketz and Miller 1996; Rittenburg and Covaleski 1997). Accordingly, the first research question is:

Q1: Does the outsourcing of a company’s internal audit function to another external auditor affect financial statement users’ perceptions of auditor independence, financial statement reliability, and a loan decision?

The second issue addressed is whether the outsourcing of a company’s internal audit function to their own external auditor affects similar perceptions and decisions. The concern is whether the external auditor can perform the internal audit function and also provide an independent “second set of eyes” at the internal control systems. As discussed, while some have raised concerns over this relationship, the overall position adopted by the AICPA is that performance of these types of services would not of themselves impair auditor independence and thus are allowable by CPAs engaged to perform the financial statement audit. In fact, there may be strong incentives to remain independent in this situation. Hence, our second overall research question is:
Q2: Does the outsourcing of a company’s internal audit function to their own external auditor affect financial statement users’ perceptions of auditor independence, financial statement reliability, and a loan decision?

Under the new guidance in Interpretation 101-13, auditors that perform the outsourced internal audit procedures cannot act or appear to act in the capacity of management or an employee of the client company. That is, company management still retains ultimate responsibility for the internal audit. This requirement is intended to maintain the auditor’s appearance as an outside professional consultant to the client’s management regarding their internal audit and related functions. Such management decision-making authority on the part of the external auditors is explicitly prohibited since it would presumably cause financial statement users to question the independence of the auditor, and as a result, the integrity of the financial statements. Accordingly, we also address the following related research issue in conjunction with the second general research question:

Q2a: Does an apparent management role on the part of the external auditor performing the outsourced internal audit function of a client affect financial statement users’ perceptions of auditor independence, financial statement reliability, and a loan decision?

Previous research has found that the separation of consulting and audit personnel has not only mitigated any independence concerns or problems but at times has also resulted in the highest perceptions of independence, financial statement reliability, and credit/investment decisions (e.g., Lowe and Pany 1995, 1996; Pany and Reckers 1984). We expect that a similar separation of personnel performing the external and internal audit functions might also result in favorable independence-related perceptions. Although the separate personnel issue has been a highly debated issue, the AICPA has not directly addressed the specific individuals within the CPA firm who are allowed to perform the outsourced internal audit. Specifically, the AICPA has not differentiated between individuals assigned to the financial statement audit engagement
and those performing the outsourced internal audit. In an attempt to address this staffing issue and assess whether financial statement users differentially view engagements with different staffing arrangements, we also examine the following related research issue concerning external auditor involvement with a client:

**Q2b:** Does the distinct separation of individuals within the CPA firm that performs the external audit versus those that perform the outsourced internal audit affect financial statement users’ perceptions of auditor independence, financial statement reliability, and a loan decision?

**RESEARCH METHOD**

The overall purpose of this research is to identify and compare the relative effects of various internal audit outsourcing arrangements on financial statement users’ perceptions and decisions. The experimental design resulted in five experimental groups to assess the research questions. Loan officers were provided with identical loan proposals, except that the manner of outsourcing arrangement was manipulated between groups. Because a between-subjects design was employed, identification of the exact nature of the manipulation was difficult (or impossible) for the subjects to assess (see Pany and Reckers 1987).

**Subjects**

In order to obtain relevant data requiring a large number of subjects from a wide variety of institutions, a significant portion of research with loan officers (i.e., Geiger 1992; Lacey 1990; LaSalle and Anandarajan 1997; Miller et al. 1993; Strawser 1994) have used mailed questionnaires. We followed this same approach. One thousand loan officers were randomly selected from a commercially prepared list and assigned to one of five experimental groups. Each subject was mailed the appropriate case instrument with the second request mailed approximately three weeks later. After removing case instruments that were returned as
undeliverable, a total of 177 usable case instruments remained. This represents an effective response rate of 17.7%. Table 1 summarizes the demographic information for the study’s useable responses. Subjects stated that about seventy-three percent of their job was devoted to granting loans. Of particular note is the extent of loan experience of the subjects. Subjects reported having an average of more than 17 years of loan experience.

Research Task

Loan officers were mailed a set of materials consisting of (1) a cover letter, (2) a brief loan case scenario, (3) financial statements with selected ratios, and (4) a questionnaire. The research task required loan officers to review a loan application and subsequently evaluate auditor independence, assess the reliability of the historical financial statements, and make a loan decision. The type of outsourcing arrangement was manipulated, as discussed in our independent measures section.
Case Information

The loan case scenario involved a regional grocery and drugstore chain desiring a loan to help finance a geographic expansion. The case was constructed based on guidelines suggested by Barrett (1990), Robert Morris Associates’ credit forms, previous research (Geiger, 1992; Johnson and Pany 1984; Lowe and Pany, 1995; Pany and Reckers 1988a, b) as well as discussions with bank loan officers. The firm size was restricted given that some loan officers would not ordinarily deal with large publicly traded firms. The financial information included three years’ statements of earnings, statements of financial position, and summaries of cash flows and one year of forecasted statements. The purpose of the $1,500,000 loan was to finance the acquisition of inventory and buildings and fixtures needed for the new locations. A brief summary of the management of the company seeking the loan was also included.

The financial statements were constructed for the company using industry data reported by Robert Morris Associates. The company had been in existence for 29 years and was publicly traded (over the counter), with total assets of approximately 12 million dollars and total sales of approximately 51 million dollars. A company of this size was considered large enough to merit auditor independence concerns, and yet not too large that the company would not likely outsource their internal audit function (Petravick 1997; Public Accounting Report 1996e). The financial information was constructed to be slightly below industry averages to allow some uncertainty as to whether a loan should be granted. Pilot tests and discussions with loan officers indicated that the loan was realistic in terms of the financial statement relationships, firm size, and items to be included in the loan proposal.
Independent Measure

In developing our independence measure we examined current practitioner and academic literature, and referred to Interpretation 101-13 to determine precisely the language that specifies when auditors are (or are not) performing management functions. Our objective was to construct an independent measure to test for any differential effects for the type of auditor (and manner) in which the internal audit function was outsourced. Our independent measure included a group in which the loan applicant performed its own internal audit activities and four groups in which the function was outsourced. Loan officers were randomly assigned to one of these five groups, (1) Not Outsourced, (2) Outsourced to Another External Auditor, (3) Outsourced to Their Own External Auditor—Management Functions, (4) Outsourced to Their Own External Auditor—Same Personnel, and (5) Outsourced to Their Own External Auditor—Different Personnel (see Figure 1).x

[INSERT FIGURE 1 ABOUT HERE]

In the Not Outsourced group, subjects were told that the company’s internal auditors perform the internal audit function. This group served as a baseline for making comparisons to the outsourcing groups and thus provided direct tests of the impact of outsourcing internal audit on perceptions of auditor independence, financial statement reliability, and on a loan decision.

For the Another External Auditor group, the internal audit function was outsourced to a CPA firm other than the one that performs the company’s external audit function. That is, another CPA firm provided assistance in the performance of internal audit activities of the company. To make it clear that the CPA firm does not perform management functions of the company, the description went on to state that included in these activities are “recommending improvements in systems, processes, and procedures,” but that “management determines which improvements should be implemented and supervises the internal audit function.”

For the Management Functions group, the internal audit function was outsourced to their own external auditor that also performs the company’s external audit function. In addition, the CPA firm also performed some of
the company’s management functions. Performing management functions as part of the outsourcing arrangement is specifically not allowed under Interpretation 101-13. Regarding the performance of management functions, the description indicated that the work of the CPA firm included the following activities, “(1) recommending improvements in systems, processes, and procedures, (2) determining which improvements should be implemented, and (3) SUPERVISING the internal audit function.”

For the remaining two groups (Same and Different Personnel), the CPA firm did not perform management functions. The focus was on the CPA firm’s staffing arrangements in performing the internal audit function. Two staffing arrangements were presented when their own external auditor was engaged to do the internal audit function. One arrangement indicated that the SAME personnel that performed the external audit also performed the outsourced internal audit activities (see Vershoor 1992). The other arrangement indicated that DIFFERENT personnel within the firm performed the external audit and the outsourced internal audit activities. Analyzing different staffing arrangements within the audit firm allows for an assessment of whether specific staffing arrangements differentially affect financial statement users, and thus whether Interpretation 101-13 should be expanded to specifically address staffing issues as a means of enhancing users’ perceptions of auditor independence.

*Manipulation Checks*

Manipulation checks were used to assess the awareness of the specific level of the independent measure. Subjects were asked (without looking back) to indicate the manner in which the internal audit function was performed. Nineteen subjects failed the manipulation checks. For the purpose of statistical analyses, subjects’ responses who failed the manipulation checks were omitted from all analyses and results presented.\textsuperscript{x}

*Dependent Measures*

The AICPA suggests that independence-related research should utilize dependent measures that examine (1) confidence in the *independence* of auditors, (2) perceptions of financial statement accuracy and *reliability*, and (3) discretionary decision making by financial statement users (AICPA 1997b). We followed these methodological recommendations by utilizing three corresponding dependent measures: auditor independence, perceived financial
statement reliability, and a loan decision. We reasoned that in situations in which less independence is perceived, lower financial statement reliability would be assessed which would lessen the possibility of a loan approval (Lowe and Pany 1995; McKinley et al. 1985; Pany and Reckers 1983).

Auditor Independence

The SEC, POB, and IIA have highlighted concerns that internal audit outsourcing provided by CPA firms for their audit clients may cause financial statement users to question auditors’ independence. To address whether auditor independence is affected by the type of auditor (and manner) in which outsourced internal audit activities are performed for audit clients, we asked each subject the following question, “How confident are you that the CPAs are independent in performing the audit?” An 11 point scale anchored on 1 (No Confidence) and 10 (Extreme Confidence) was used.

Financial Statement Reliability

We included the following two questions to assess perceptions about financial statement reliability, “How confident are you that the audited financial statements are free from unintentional (alternatively, intentional) misstatements or omissions?” The same 11 point scale used for the auditor independence question was employed for these two financial statement reliability questions.

Loan Decision

Loan officers were asked to make either an approve or reject recommendation on the loan application. It is expected that in situations in which less auditor independence and financial statement reliability is perceived, the loan decision would be tempered due to increased information risk.
RESULTS

Since we utilized related dependent measures for our study, we employed a multivariate analysis of variance (MANOVA) and Chi-square tests to analyze whether responses taken together are significantly different across all five levels of the experimental manipulation. MANOVA results for the continuous dependent measures were significant ($F=2.26, p=.009$). In addition, the Chi-square results for the dichotomous loan decision was also significant ($\chi^2=11.464, p=.022$). We next proceeded to use one-way analysis of variance (ANOVA) and Chi-square tests to examine specific groups in relation to our research questions. Certain assumptions underlying the statistical models were also conducted and found satisfactory.

Research Question 1

The first research question examined whether the outsourcing of the internal audit function by the company to another external auditor (i.e., not their own external auditor), affects financial statement user perceptions of auditor independence and financial statement reliability as well as a loan decision. As expected, results revealed no significant differences in loan officers’ perceptions or in the lending decision between situations in which the company outsourced its internal audit to another external auditor and when the company did not outsource, as shown in Table 2. That is, loan officers did not view the outsourcing of the internal audit differently than performing this function in-house.

[INSERT TABLE 2 ABOUT HERE]
Research Question 2

The second general research question examines whether the outsourcing of the internal audit function to the company’s external auditor affects financial statement users’ perceptions of auditor independence and financial statement reliability, as well as a loan decision. We examined three different situations in which the company’s external auditor performed the outsourced internal audit as well as a situation in which the internal audit was not outsourced. The ANOVA results indicate that the independence measure was significant (F=5.64, p=.001), as shown in Table 3. Regarding financial statement reliability, the intentional misstatements measure was significant (F=4.17, p=.008), whereas, the unintentional misstatements measure was only marginally significant (F=2.13, p=.100). Finally, there was a great disparity of loan acceptance rates resulting in significant Chi-square results ($\chi^2 = 9.75$, p=.021).

[INSERT TABLE 3 ABOUT HERE]

The overall results presented in Table 3 indicate that loan officers significantly modified their perceptions of auditor independence, the reliability of the financial statements, and their loan decision, when the external auditor performed the outsourced internal audit compared to when this function was performed in house. These findings also indicate that the type of internal audit outsourcing relationship between the external auditor and their audit client affects these perceptions and decisions. These findings are investigated further in terms of two related research issues, (1) performing management functions and (2) staffing arrangements.

Performing Management Functions

The first related research issue (Q2a) examines the external auditor involvement with management functions while performing the outsourced internal audit. Duncan multiple comparisons revealed that the Management Functions group had significantly lower ratings of auditor independence than the not-outsourced group (p<.05). Further, the Management Functions group had the lowest means regarding auditor independence (5.56), unintentional misstatements (5.93), and intentional misstatements (6.48), as compared to all of the other
groups. The Management Functions group also exhibited a significantly lower percentage of loan officers granting the loan (26%) as compared to the not-outsourced group (50%), in which loan officers were evenly split as to accepting or rejecting the loan request. Taken together, these results indicate that financial statement users have decidedly negative reactions when the external auditor assumes management functions in the performance of the outsourced internal audit. These results also support the AICPA’s current restriction against providing management functions in conjunction with performing the outsourced internal audit.

Staffing Arrangements

The second related research issue (Q2b) when auditors perform internal audit outsourcing for their audit clients, is the staffing of the engagement. We examined two types of staffing arrangements within the CPA firm—using DIFFERENT and the SAME personnel for external and internal audits. An examination of Table 3 indicates that these two staffing arrangements within the CPA firm were perceived quite differently. Duncan multiple comparisons between these two groups indicated that the Different Personnel group had significantly higher perceptions regarding the auditor independence and intentional misstatements measures than the Same Personnel group (p<.05). Overall, the Different Personnel group had the highest rating of auditor independence (7.39) and confidence that the financial statements were free from unintentional and intentional misstatements (7.30 and 8.39) than all the groups examined in the study. Further, the loan granting percentage of the Different Personnel group (70%) was marginally significantly higher (p<.06) than the Same Personnel group (45%), and considerably higher than any of the compared groups. These consistent results indicate that loan officers viewed the separation of personnel performing the external and internal audit very positively. These results also suggest that if the AICPA and the ISB want to improve perceptions of
independence with respect to external auditors performing the internal audit function of their clients, one way to achieve that objective would be to require separation of the external audit firm personnel.

**LIMITATIONS**

The results presented in our study must be viewed in light of certain limitations. First, it was not possible to objectively measure the realism of the case instrument. The case materials were based on extensive consultation with loan officers and review of Robert Morris Associates industry data. Nevertheless, to keep the case instrument at a reasonable length, we may have omitted certain information relevant to the loan decision process.

Second, although the effective response rate was only about 18 percent, it is similar to other related studies examining loan officer perceptions and decisions (i.e., Miller et al. 1993; Strawser 1994). We analyzed the dependent measure responses and demographic information of subjects responding to the first request compared to the second request (see Oppenheimer 1976). No significant differences for the dependent measures or demographic information were noted. In addition, Chi-square tests revealed that the actual number of observations per cell was not significantly different from observations expected given an equal response rate per cell. While it is difficult to determine if nonrespondent bias existed in our study, the above analysis suggests that the extent of any such bias is minimal.

Finally, not all possible internal audit outsourcing arrangements were addressed in this study. For example, we did not assess other non-audit CPA firms performing management functions, or outsourcing the internal audit function to non-CPA providers (Public Accounting Report 1997a; Rittenburg and Covaleski 1997). Nor did we examine an arrangement in which an integrated audit team—a combination of the company’s internal auditors and the CPA firm
auditors—perform the company’s internal audit (see Hodgson and Puschaver 1995). However, the experimental conditions presented to subjects were specifically created to make assessments of the research questions of interest. Future research should examine other scenarios (and related interactions) to provide additional understanding of the effects of internal audit outsourcing.

CONCLUSIONS AND IMPLICATIONS

The results of this study provide important insights into the effects of various internal audit outsourcing arrangements. Our findings support the AICPA position that outsourced internal audit activities performed by the company’s external audit firm does not, by itself, appear to significantly impact financial statement users’ perceptions of auditor independence and other related decisions. This is an important finding given that the primary concern of regulators and particularly the IIA are situations in which the entire internal audit function is outsourced to the same CPA firm that performs the external audit. It is this type of outsourcing arrangement that is expected to increase as the recent AICPA interpretation has prompted some of the Big Five firms to increase their marketing efforts of internal audit services to existing (external) audit clients (Internal Auditor 1996; Public Accountant Report 1996c).

The results also support the AICPA’s position (see Interpretation 101-13) that if public accountants are associated with their client’s internal audit activities, that they should not perform management functions with respect to the internal audit. Our study found that having external auditors perform management functions as part of the outsourced internal audit was associated with the most negative perceptions of auditor independence and financial statement reliability, as well as the lowest loan acceptance rates. Apparently, financial statement users perceived that it was less appropriate for the external auditors to both supervise the internal audit function and make decisions regarding the implementation of systems improvements.
Further, our results confirmed assertions that independence concerns could be reduced by providing a wall between CPA firm engagement teams providing internal and external audits. We found that the separation of internal and external audit personnel within the CPA firm not only minimized any potential independence concerns, but also resulted in the most favorable perceptions of auditor independence and reliability of the financial statements, and resulted in the highest loan acceptance rates. These results are analogous to Lowe and Pany (1995, 1996) and Pany and Reckers (1984) who found that financial statement users perceived a higher degree of independence in the performance of an audit when the consulting and audit personnel were separate as opposed to when they were combined.

Apparently, subjects in our study looked favorably upon the external auditor as a provider of outsourced internal audit as long as the external auditor does not perform management functions or have the same personnel performing both internal and external audit functions. We suggest two reasons for these results. First, the additional potential legal liability borne by CPA firms who also perform internal audits for their (external) audit clients may enhance their perceived objectivity and independence (AICPA 1997b). While the nature of the employer/employee relationship provides internal auditors limited liability, public accounting firms have the resources to pay substantial damages to clients following an internal audit failure in connection with outsourced internal audit services (Caplan and Kirschenheiter 1999). In fact, Ahlawat (1998) found that due to concerns over malpractice litigation, outsourced (external) auditors were actually more objective than in-house (internal) auditors. Second, CPA firms that perform both external and internal audits of their clients may be perceived to have incentives to protect their economic interests and thereby safeguard independence. That is, the increased
quasi-rents of performing both audit functions may actually reinforce the independence between the auditor and their clients (AICPA 1997b).

While some have suggested that CPA firms should be strictly precluded from performing outsourced internal audits for attest clients (i.e., Internal Auditor 1996; Public Accounting Report 1996a; Sutton 1996), our study suggests that the key to solving potential independence problems may be with the separation of CPA firm personnel. These findings may be of interest to the newly formed Independence Standards Board in establishing policies and procedures regarding internal audit outsourcing as well as developing a conceptual framework. Issuance of a staff separation requirement by the Independence Standards Board would be effective for SEC registrants and thus be applicable for publicly traded companies for which public perception of auditor independence is paramount.
ENDNOTES
REFERENCES


______. 1996a. AICPA delves into “double duty” audit practices (March 15): 1, 7.

______. 1996b. KPMG Restructures to reposition outsourcing (May 15): 1, 7.
_____. 1996d. SEC’s Sutton attacks expanded services (August 31): 3.
_____. 1996e. Small and mid-sized companies leverage through outsourcing (September 30): 3.
_____. 1997b. ISB updates auditor independence (October 15): 1,4.


FIGURE 1
Experimental Design

<table>
<thead>
<tr>
<th>Group Number</th>
<th>Internal Audit Outsourced?</th>
<th>Outsourced To</th>
<th>Staff Separation</th>
<th>Assume Mngt. Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>Another External Auditor</td>
<td>---</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Yes</td>
<td>Their Own External Auditor</td>
<td>Same Personnel</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Yes</td>
<td>Their Own External Auditor</td>
<td>Same Personnel</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Yes</td>
<td>Their Own External Auditor</td>
<td>Different Personnel</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Group 1</td>
<td>Group 2</td>
<td>Group 3</td>
<td>Group 4</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Group Size</strong></td>
<td>42</td>
<td>28</td>
<td>27</td>
<td>38</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>44.3</td>
<td>44.6</td>
<td>43.2</td>
<td>43.3</td>
</tr>
<tr>
<td></td>
<td>(11.0)</td>
<td>(7.7)</td>
<td>(9.8)</td>
<td>(9.9)</td>
</tr>
<tr>
<td><strong>Loan Experience</strong></td>
<td>16.7</td>
<td>18.0</td>
<td>16.9</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>(10.1)</td>
<td>(7.9)</td>
<td>(8.3)</td>
<td>(9.2)</td>
</tr>
<tr>
<td><strong>Percentage of Job Devoted to Loans</strong></td>
<td>72.1</td>
<td>74.5</td>
<td>70.8</td>
<td>79.1</td>
</tr>
<tr>
<td></td>
<td>(21.8)</td>
<td>(23.9)</td>
<td>(23.4)</td>
<td>(19.3)</td>
</tr>
<tr>
<td><strong>Knowledge of Auditing(b)</strong></td>
<td>6.8</td>
<td>6.5</td>
<td>6.5</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>(1.5)</td>
<td>(1.6)</td>
<td>(1.7)</td>
<td>(1.4)</td>
</tr>
<tr>
<td><strong>Availability of Loanable Funds(c)</strong></td>
<td>7.0</td>
<td>7.2</td>
<td>7.3</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>(2.2)</td>
<td>(1.8)</td>
<td>(2.3)</td>
<td>(2.2)</td>
</tr>
<tr>
<td><strong>Title</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>President/CEO</td>
<td>5</td>
<td>0</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Vice President</td>
<td>78</td>
<td>100</td>
<td>82</td>
<td>92</td>
</tr>
<tr>
<td>Loan Officer</td>
<td>15</td>
<td>0</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Credit Analyst</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>Degrees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Associates</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Bachelors</td>
<td>64</td>
<td>85</td>
<td>70</td>
<td>66</td>
</tr>
<tr>
<td>Masters</td>
<td>22</td>
<td>11</td>
<td>26</td>
<td>18</td>
</tr>
</tbody>
</table>

\(a\)Refer to Figure 1 for specific group designations.  
\(b\)Measured on a scale anchored on 0 for Not Knowledgeable At All to 10 for Very Knowledgeable. 
\(c\)Measured on a scale anchored on 0 for Low to 10 for High.
### TABLE 2
**Research Question 1**
The Effects of Outsourcing the Internal Audit Function to Another External Auditor
Treatment Means (Standard Deviations)

<table>
<thead>
<tr>
<th>Group</th>
<th>Auditor Independence(^a)</th>
<th>Financial Statement Reliability(^b)</th>
<th>Loan Decisions(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Outsourced</td>
<td>7.00 (1.68)</td>
<td>6.54 (2.05)</td>
<td>7.09 (2.16)</td>
</tr>
<tr>
<td>Outsourced to Another</td>
<td>6.71 (2.03)</td>
<td>6.64 (2.06)</td>
<td>7.11 (2.55)</td>
</tr>
<tr>
<td>External Auditor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Significance Levels    | .524                        | .833                                 | .978                  | .378                                 |

\(^a\)Measured on an 11 point scale anchored on 0 for No Confidence to 10 for Extreme Confidence.
\(^b\)Measured on the same scale as above.
\(^c\)This represents the percentage of loan officers that granted the loan.
TABLE 3
Research Question 2
The Effects of Outsourcing the Internal Audit
Function to Their Own External Auditor
Treatment Means (Standard Deviations)

<table>
<thead>
<tr>
<th>Group</th>
<th>Auditor Independence(^a)</th>
<th>Financial Statement Reliability(^b)</th>
<th>Loan Decisions(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unintentional</td>
<td>Intentional</td>
</tr>
<tr>
<td>Not Outsourced (NO)</td>
<td>7.00</td>
<td>6.54</td>
<td>7.09</td>
</tr>
<tr>
<td></td>
<td>(1.68)</td>
<td>(2.05)</td>
<td>(2.16)</td>
</tr>
<tr>
<td>Outsourced to Own External Auditor—</td>
<td>5.56</td>
<td>5.93</td>
<td>6.48</td>
</tr>
<tr>
<td>Mngt. Functions (MF)</td>
<td>(2.03)</td>
<td>(2.06)</td>
<td>(2.06)</td>
</tr>
<tr>
<td>Outsourced to Own External Auditor—</td>
<td>6.23</td>
<td>6.24</td>
<td>7.24</td>
</tr>
<tr>
<td>Same Personnel (SP)</td>
<td>(2.05)</td>
<td>(2.04)</td>
<td>(1.90)</td>
</tr>
<tr>
<td>Outsourced to Own External Auditor—</td>
<td>7.39</td>
<td>7.30</td>
<td>8.39</td>
</tr>
<tr>
<td>Diff. Personnel (DP)</td>
<td>(1.23)</td>
<td>(1.92)</td>
<td>(1.30)</td>
</tr>
</tbody>
</table>

Significance Levels

| .001 | .100 | .008 | .021 |

Significant Differences

<table>
<thead>
<tr>
<th>NO&gt;MF(^*)</th>
<th>None</th>
<th>DP&gt;NO,MF,SP(^*)</th>
<th>NO,DP&gt;MF(^*)</th>
<th>DP&gt;SP(^**)</th>
</tr>
</thead>
</table>

\(^a\) Measured on an 11 point scale anchored on 0 for No Confidence to 10 for Extreme Confidence.

\(^b\) Measured on the same scale as above.

\(^c\) This represents the percentage of loan officers that granted the loan.

\(^*\) Significantly different at the 0.05 level [using Duncan family confidence intervals].

\(^**\) Significantly different at the 0.1 level [using Duncan family confidence intervals].
Fresh Plus, Inc., a new loan prospect for your bank, is considering expanding. The company is incorporated in your state and is headquartered locally. Fresh Plus, Inc. has been engaged in the retail grocery business since 1968. The company, which is publicly traded (over the counter) sells grocery produce, staple goods, household items and non-prescription drugs and health care products similar to their other “super market” competitors. Currently, the company has 32 stores (six in your area), all operated in leased or owned premises averaging 24,000 sq. ft. and operates two distribution centers averaging 60,000 sq. ft. Fresh Plus, Inc. market share has decreased slightly in recent years as new stores have entered the industry. The company’s recent credit history has been reasonably good reflecting its steady, predictable growth.

To further increase sales and expand into new geographic areas, management is considering opening 3 new stores. To help accomplish this objective, the company is seeking additional financing of $1,500,000 to be used as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional inventory items</td>
<td>$ 550,000</td>
</tr>
<tr>
<td>Additional buildings and fixtures</td>
<td>800,000</td>
</tr>
<tr>
<td>Compensating balance</td>
<td>150,000</td>
</tr>
</tbody>
</table>

Since most of the company’s fixed assets serve as collateral for other loans, the company wishes to use the new asset acquisitions noted above plus $300,000 of existing inventory as collateral for this loan. Management would prefer that the loan be payable in equal quarterly installments plus interest and is willing to pay a 1% service fee. At your request, the company has provided three years of audited financial data, a one-year forecast, cash flow information, and selected ratio and footnote information.

Fresh Plus, Inc. has been audited for the last few years by a large international “Big-Six” CPA firm which has always given a “clean” unqualified opinion that management’s financial statements follow generally accepted accounting principles (GAAP). The CPA firm also provides assistance in the performance of internal audit activities of the company. Included in the CPA firm’s internal audit activities are recommending improvements in systems, processes, and procedures. Fresh Plus, Inc. management determines which improvements should be implemented and supervises the internal audit function. The CPA firm uses the SAME personnel for both performing the internal audit and performing the financial statement (external) audit.

The executive officers are as follows:

PRESIDENT: James Wilson, age 48 (B.S. in Management, MBA-Columbia, 1973). A former top manager for a large competitor, Jim has more than 20 years of experience in the retail grocery industry. His primary responsibilities are marketing the store’s distinctiveness, maintaining control of overall operations and enhancing the company’s image. He also has primary responsibility for determining new store locations.

VICE-PRESIDENT PERSONNEL: Wendy Kirk, age 42 (B.S. in management). Wendy was Assistant Personnel Director for eight years before replacing the former VP of Personnel two years ago. She is responsible for all hiring, termination and promotions pertaining to the various store and district managers.

VICE-PRESIDENT DISTRIBUTION: Frank Carter, age 45 (B.S. in management, MBA-Duke, 1976). In his former employment Frank was in charge of wholesale produce distribution centers and has 18 years experience in the grocery industry. His primary duties are monitoring and controlling inventory distribution to the stores.

CONTROLLER: Kenneth Heydt, age 37 (B.S. in accounting, CPA). A former assistant controller (till 1989), Ken also has 7 years of national CPA experience. His primary duties include
maintaining the accounting system, developing corporate accounting policy, and financial reporting.
Except for the 1996 forecasted information, the financial information has been abstracted from the GAAP based financial statements of Fresh Plus, Inc. The financial statements have been audited by a local office of a “Big Six” CPA firm; the CPA firm has not been associated with the forecast. The same CPA firm that performs the financial statement (external) audit also provides assistance with internal audit activities of the company. The CPA firm performs both internal and external audits using the SAME audit personnel for both functions.

**STATEMENT OF FINANCIAL POSITION**

|                | Forecast | 1996- | 1995- | 1994- | 1993-
|----------------|----------|-------|-------|-------|-------
| Cash           | 1,250    | 1,280 | 973   | 801   |
| Accounts Receivable (Net) | 838     | 696   | 577   | 597   |
| Inventory      | 4,080    | 3,475 | 3,819 | 3,465 |
| Other Current Assets | 366     | 359   | 491   | 464   |
| ---             |----------|-------|-------|-------|-------
| TOTAL CURRENT ASSETS | 6,534   | 5,810 | 5,860 | 5,327 |
| Fixed Assets (Net) | 6,059   | 5,301 | 5,038 | 4,762 |
| Other Non-Current Assets | 1,661  | 1,303 | 1,091 | 783   |
| ---             |----------|-------|-------|-------|-------
| TOTAL ASSETS    | 14,254   | 12,414| 11,989| 10,872|       |
| Accounts Payable| 3,295    | 2,882 | 2,442 | 2,495 |
| Current Maturities--Long Term Debt | 570    | 420   | 420   | 300   |
| Notes Payable   | 448      | 446   | 412   | 421   |
| Other Current Liabilities | 1081    | 1,158 | 1,209 | 1,003 |
| ---             |----------|-------|-------|-------|-------
| TOTAL CURRENT LIABILITIES | 5,394   | 4,906 | 4,483 | 4,219 |
| Long-Term Debt  | 4,160    | 3,300 | 3,720 | 3,140 |
| Other Non-Current Liabilities | 497    | 360   | 152   | 254   |
| Net Worth       | 4,203    | 3,848 | 3,634 | 3,259 |
| ---             |----------|-------|-------|-------|-------
| TOTAL LIABILITIES AND NET WORTH | 14,254 | 12,414| 11,989| 10,872|     

**STATEMENT OF EARNINGS**

|                | Forecast | 1996- | 1995- | 1994- | 1993-
|----------------|----------|-------|-------|-------|-------
| Sales Revenue  | 61,500   | 51,218| 47,882| 42,496|       |
| Costs of Goods Sold | 48,513 | 41,026| 38,445| 33,278|       |
| ---             |----------|-------|-------|-------|-------
| Gross Profit    | 12,987   | 10,192| 9,437 | 9,218 |
| Operating Expenses | 11,214 | 8,707 | 8,352 | 7,983 |
| Other Expenses (includes interest) | 1,050 | 963   | 691   | 724   |
| ---             |----------|-------|-------|-------|-------
| Income Before Taxes | 723    | 522   | 394   | 511   |
| Income Taxes    | 218      | 199   | 112   | 194   |
| NET INCOME      | 505      | 333   | 282   | 317   |
| ---             |----------|-------|-------|-------|-------

**STATEMENT OF RETAINED EARNINGS**

Forecast
<table>
<thead>
<tr>
<th>(in thousands)</th>
<th>-1996-</th>
<th>-1995-</th>
<th>-1994-</th>
<th>-1993-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance</td>
<td>2,238</td>
<td>2,040</td>
<td>1,887</td>
<td>1,682</td>
</tr>
<tr>
<td>+ Net Income</td>
<td>505</td>
<td>333</td>
<td>282</td>
<td>317</td>
</tr>
<tr>
<td>- Dividends</td>
<td>(150)</td>
<td>(135)</td>
<td>(129)</td>
<td>(112)</td>
</tr>
<tr>
<td>Ending Balance</td>
<td>2,593</td>
<td>2,238</td>
<td>2,040</td>
<td>1,887</td>
</tr>
</tbody>
</table>
RATIOS AND OTHER INFORMATION
(They have been calculated properly) -1996- -1995- -1994- -1993-

Forecast

Current Ratio 1.21 1.18 1.31 1.26
Quick Ratio .39 .40 .35 .33
Sales/Receivables 80.18 80.50 81.60 85.40
Cost of Sales/Inventory 12.84 11.30 10.60 10.20
Sales/Working Capital 53.95 44.90 38.60 39.70
Fixed Assets/Net Worth 1.44 1.39 1.39 1.46
Long -Term Debt/Net Worth .99 .85 1.02 .97
Sales/Total Assets 4.31 4.20 3.95 3.91
Profit Before Taxes/Net Worth 17.20 13.60 10.80 15.70
Return on Sales (%) .82 .65 .59 .75
Return on Net Worth (%) 12.02 8.65 7.76 9.73

CASH FLOW INFORMATION
From Operations (before taxes) 641,126 428,196 390,074 405,064
Stock Issued -0- 75,982 63,472 -0-
Dividends Paid 150,000 135,000 129,380 112,498
For Capital Asset Acquisitions 975,000 240,755 245,113 234,581

NOTES TO THE FINANCIAL STATEMENTS

Note A: Long-term Debt (in Thousands)

Capital lease obligations 2,720 2,840 2,440
Installment note payable to 1st National Bank 400 500 -0-
Installment notes payable to Eastern Bank 600 800 1,000

------------
3,720 4,140 3,440
Less: Current Maturities 420 420 300

------------
3,300 3,720 3,140

The company operates in several leased facilities. Lease terms generally range up to twenty-five years for stores and thirty-five for other facilities, with options to renew for additional periods. In addition, the company leases some store equipment and trucks. (Figures are shown at present value of the net minimum lease payments).

The installment notes payable to 1st National Bank are payable in quarterly installments of $25,000, plus interest at 8%. The installment notes payable to Eastern Bank are payable in quarterly installments of $50,000, plus interest at 9%.

\(^{1}\) For more background regarding the dialog with the SEC concerning the acceptability of performing outsourced internal audit work, see the 1994-1995 Annual Report of the Public Oversight Board (POB 1995).
This study focuses on independence in appearance as opposed to independence in fact and, unless otherwise noted, the term “independence” should be considered as independence in appearance.

An advertisement for internal audit outsourcing contains a Big Five firm's proposal that it would make a client's internal audit function into "a more effective management tool" (Cheney 1996).

In Accounting Series Release No. 264, the SEC observed that: "The broader base of knowledge about, and a greater understanding of, the client's business, which results from the performance of nonaudit services may improve the efficiency and thoroughness of the audit. This broader perspective on the audit is healthy and desirable" (SEC 1979).

For example, extended audit procedures such as detailed confirmations of accounts receivable essentially expand the activities performed during an audit of the financial statements and would not appear to impair independence if performed by the same individual(s). However, extended audit procedures such as the monthly review of the client’s business processes for their functioning, efficiency or effectiveness and providing recommendations to management, may be perceived less positively by outside financial statement users if these procedures are performed by the same individual(s) within the CPA firm that performs the external audit.

When separate engagement teams provide audit and nonaudit services to a client, there are normally communication channels in place to enable knowledge transfers. For instance, some firms have certain individuals that are responsible for ensuring that this information transfer takes place (see also AU 311.04) (AICPA 1997b; Rittenburg and Covaleski 1997).

Zhou (1998) and Krishnan and Zhou (1997) argue that some companies may want to have different (rival) auditors perform the outsourced internal audit in order to provide competition to their external auditor.

The possibility of demographic differences among the groups was analyzed using one-way ANOVAs for the continuous factors and Chi-square analysis for the noncontinuous factors. No significant (p<.10) demographic differences were found among the five groups of usable responses, suggesting that random assignment to experimental conditions was successful.

Discussions with loan officers (having considerable experience in lending decisions) provided input regarding the monetary range of loans they normally encounter, financial statement relationships which appear reasonable, conditions of the loan (i.e., collateral, fixed versus floating rate, loan service fees, length of loan) and items to be included in the loan proposal.

Ideally, a full factorial design would have been appropriate to assess the study's research questions. The design was not considered feasible due to problems crossing certain factors and difficulty (and cost) of obtaining sufficient data.
Statistical analyses were run both with and without those who missed the manipulation check questions. The effect on results was minimal and did not affect our conclusions. For more on the use of manipulation checks and on omitting those who reply incorrectly, see Uecker et al. (1981).

Separate analysis was also performed on the loan decision using the availability of loanable funds measure as a covariate in a probit model. Results from this analysis were substantially the same as that presented.

Additionally, separate one-way ANOVAs for the continuous dependent measures indicated significant differences between the groups for the perception of auditor independence measure ($F=4.09, p=.004$) and the intentional misstatements measure ($F=2.80, p=.028$).

ANOVA assumes equal variances across the designated groups and that the error terms are normally distributed. Using Cochran’s and Bartlett-Box tests, the homogeneity of variances assumptions were satisfied. The data, however, were clearly not normally distributed as the dependent measures were gathered using 11 point Likert scales. But, as Glass and Stanley (1970), Lunney (1970), and Neter et al. (1985) indicate, the effects of non-normality on the nominal level of significance of the F-test are extremely slight. Kruskal-Wallis non-parametric tests also revealed essentially the same results as the ANOVA.